

WETLANDS



District of Columbia
Fisheries and Wildlife Division

What are Wetlands?

A wetland is an area that has unique soil, vegetation adapted to or tolerant of saturated soils and standing water at some point during the year.



Wetland Soils

What's so special about Dirt?

Wetland soils are hydric, which means that the soil is saturated with water long enough for anaerobic conditions to develop.

Characteristics of Wetland Soil :

- May be dark brown or black in color.
- May be partly composed of peat or other organic matter.
- May smell like rotten eggs (hydrogen sulfide).
- May see “mottling”.

Plant Adaptations

Dealing with Anoxia:

Special structures called aerenchyma transport O₂ from the leaves to the roots.

Salt:

In saline wetland environments plants have developed strategies to excrete or exclude salt.



Structure:

- Soft bodied plants growing in the water must be lightweight.
- Many aquatic plants have specialized channels for holding water and stem support.

Wetland Functions

Wetlands have been referred to as “the kidneys of the land”, why might this analogy be made?

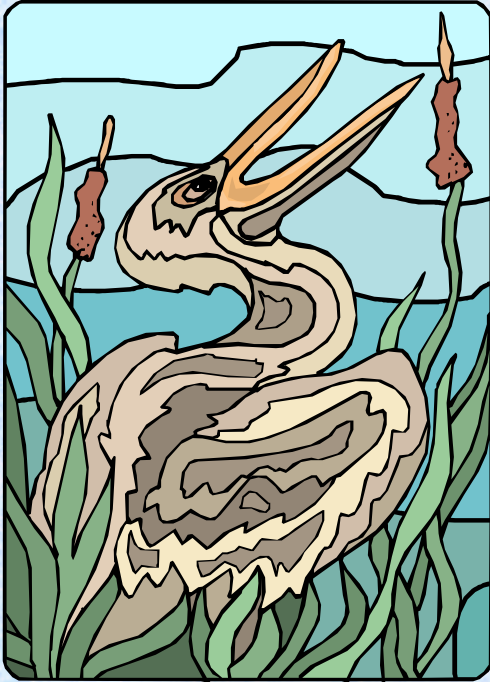
In our bodies the kidney functions to filter or clean our blood. Wetlands perform a similar function by filtering and purifying water in aquatic environments.

What are some of the other functions or uses of wetlands?

- Recreation (beauty and scenic value)
- Erosion control
- Flood protection
- Habitat and food resource



Wetland Plants



- Cattails
- Rushes
- Sedges
- Shrubs
- Hydrilla
- Tall Grasses
- Wild rice
- Moss
- Water lily
- Wildflowers

Trees: Sycamore, Red Maple, Pin Oak, Black Willow and Cypress.

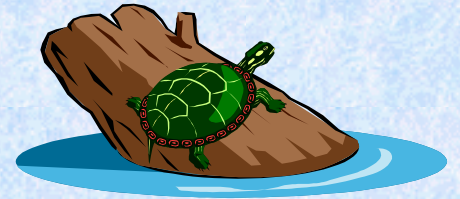
Vines: Poison Ivy, Honeysuckle and cranberries.



Wetland Animals

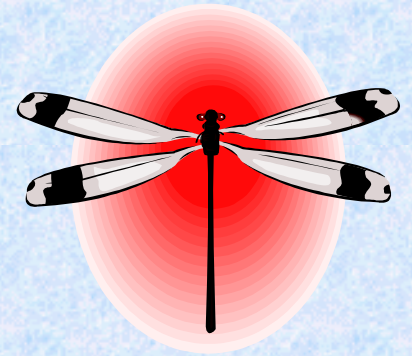
Reptile and Amphibians:

Lizards, snakes, turtles and more.



Insects:

Dragonfly, damselfly, horsefly, deerfly, butterfly, moths, water mites, ticks, spiders, mosquito, beetles and more.



Birds and Mammals:

Ducks, geese, herons, hawks, eagles, owls, songbirds and shorebirds. Mammals include: raccoon, fox, beaver, shrew, mouse, mink, nutria, beaver, otter, deer and more.

Fish and other Aquatic Life:

Fish, snails, crabs, crayfish and more.



Types of Wetlands

What type of water is can wetlands contain?

- Fresh
- Salt
- Brackish



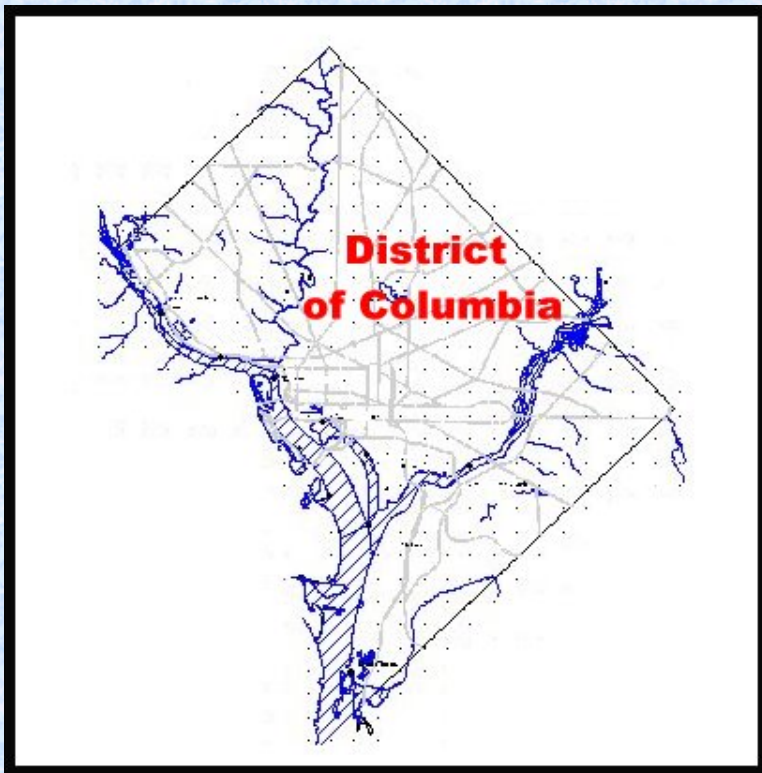
Common types of wetlands:

- Flooded Meadows
- Bogs
- Swamps
- Marshes
- Prairie Potholes



Local Wetlands

Where are the local wetlands?



- **Anacostia River**
- **Kingman and Heritage Island**
- **Washington Channel**
- **Theodore Roosevelt Island**
- **Kenilworth Aquatic Gardens**
- **C&O Canal**
- **Rock Creek Spring Site**

Conservation

The importance of Wetlands:

- **Very productive and diverse ecosystems.**
- **Protect upland and aquatic environments.**
- **Nursery function.**
- **Habitat for about 35% of all U.S. plants and animals listed as endangered or threatened.**

